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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/772,213	02/04/2004	Sang H. Lee	1200302R	4251
35227	7590	06/12/2006		
POLYONE CORPORATION 33587 WALKER ROAD AVON LAKE, OH 44012				
			EXAMINER EDWARDS, NEWTON O	
			ART UNIT	PAPER NUMBER

1774

DATE MAILED: 06/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/772,213	Applicant(s) LEE ET AL.	
	Examiner N Edwards	Art Unit 1774	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 10-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 8 and 9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>6/7/04 and 5/14/04</u> | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 1774

Applicant argues that 1) the restriction includes speculation of extruding which is the method actually used in group II.

The restriction method set forth six steps while the group II step forth two steps. Thus, the method of the restriction and group II are not the same. Hence, The restriction is deemed proper for reasons of record and hereby made FINAL.

1. Claims 1-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 overall is vague and indefinite since there is no transitional phrase in the claim. Also if applicant wants the fiber-reinforced polymer of vinyl chloride monomer to have patentable weight instead of intended use, it should be placed in the body of the claim after the transitional phrase (for example, consisting of). Claims 6, 7, 8, and 9 are indefinite since the term fibers lack proper antecedent basis and the term fiber in claim fiber has the problem above in claim 1. Correction is required.

Claim 5 "the polymer of vinyl ..." is indefinite since the phrase is not place after a transition phrase in claim 1. Correction is required.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the

Art Unit: 1774

applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1,2,3,4, and 9 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Kuroda (US 6,821,599).

Kuroda teaches fabric (article) comprising an acrylic and a vinyl chloride monomer wherein the article has a specific gravity (actual specific gravity) and a true specific gravity (theoretical) yield a ratio from .898 to .999. See example 1-7 and comparative examples 1-4. See col. 5 lines 16-30 and table 1, for example.

Regarding claim 9, since the range up to about 40% includes zero, this make the (glass) fibers not mandatory, making Kuroda read on the claim.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 6,7,8,and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuroda in view of Fiberloc Trade Mark 97510 or 97520 or 97330 (secondary references).

Kuroda is applied for all the reasons of record. Kuroda teaches all of the claimed article except having glass fibers. All of the secondary references teach is it well known in the art to incorporate from about 10 to about 30 % glass fiber additive in a vinyl compound in order to increase the flexural strength and flexural modulus.


Art Unit: 1774

Hence, it would have been obvious to one having ordinary skill in the art to incorporate the glass fibers, as taught by the secondary reference, in the polymer, as taught by Kuroda in order to increase the flexural strength and flexural modulus of the polymer.

6. Claim 5 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The cited patent discloses the state of the prior.

Any inquiry concerning this communication should be directed to Primary Examiner Edwards at telephone number 571-272-1521.



N Edwards
Primary Examiner
Art Unit 1774